

## EACP Committee

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**From:** Kelly King  
**Sent:** Wednesday, December 2, 2020 9:12 PM  
**To:** EACP Committee  
**Subject:** FW: Local Legislative Options to Regulate 5G  
**Attachments:** 5G Local Legislative Options Greene Report.pdf

With Aloha,



### Office of Councilmember Kelly Takaya King

South Maui Residency  
Office: 808.270.7108  
200 South High Street, 8<sup>th</sup> Fl  
Wailuku HI 96793  
[mauicounty.us](http://mauicounty.us)

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**From:** Debra Greene <debra@DebraGreene.com>  
**Sent:** Monday, November 23, 2020 1:56 PM  
**To:** Shane M. Sinenci <Shane.Sinenci@mauicounty.us>; Tamara A. Paltin <Tamara.Paltin@mauicounty.us>; Kelly King <Kelly.King@mauicounty.us>; Mike J. Molina <Mike.Molina@mauicounty.us>; Tasha A. Kama <Tasha.Kama@mauicounty.us>; Alice L. Lee <Alice.Lee@mauicounty.us>; Yukilei Sugimura <Yukilei.Sugimura@mauicounty.us>  
**Cc:** Kasie M. Takayama <Kasie.Apotakayama@mauicounty.us>  
**Subject:** Local Legislative Options to Regulate 5G

Aloha Chair Sinenci and EACP Committee members,

Congratulations to everyone on your election victories!

I'm writing to follow-up on our 5G panel back in July. At that time several committee members expressed a desire for legislative action to regulate 5G in Maui County. I am pleased to share with you the attached Report on Local Legislative Options to Regulate 5G.

As stated in the report, the lack of an ordinance to regulate 5G infrastructure in Maui County makes the County a target for rapid and unregulated 5G deployments. Currently we have 14 5G towers on Maui with more in the pipeline. We are hoping for legislative action soon.

The attached report was crafted specifically for Maui County and contains the following sections:

- 1) Background
- 2) Caution about a Resolution

- 3) Caution about FirstNet
- 4) Litigation and Threats of Litigation
- 5) Local Communications Ordinances
- A Conservative Approach
- A Bolder Approach
- 6) Current Ordinances

Please look over the report and contact me with any questions. Thank you!

Sincerely,

Debra

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Debra Greene, PhD  
Founding Director  
[KeepYourPower.org](http://KeepYourPower.org)

PHONE: 808-874-6441

WEBSITE: [www.KeepYourPower.org](http://www.KeepYourPower.org)

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## **Local Legislative Options to Regulate 5G**

Report by Debra Greene, PhD

Updated November 23, 2020

### **Background**

“5G” is a marketing term that can mean whatever the telecommunications carriers want it to mean, and they have been changing its meaning as more and more people speak out against 5G. Adding further complication, 5G includes 4G, and builds onto it. As such, none of the existing towers or antennas will be removed, they will be added to with ever increasing infrastructure densification.

A relatively new technology, the legal and legislative aspects of 5G are rapidly changing as an increasing number of communities are impacted by this novel and untested technology. (This report will be updated accordingly; please check for the latest version.) The FCC, the federal regulating agency, has been overtaken by the industry it is purportedly to regulate. Thus, complying with FCC guidelines does not ensure public safety. Currently the agency has multiple lawsuits filed against it regarding its outdated radiation exposure limits and related issues. We, the people, are not being protected by the FCC.

Once a tower/antenna facility is built the owner can increase the power and change frequencies, often remotely, at any time (as long as they stay within the outdated FCC guidelines). They can also add equipment (more antennas, microwave dishes, etc.) at any time (as long as that doesn't increase tower height or footprint).

When the Telecommunications Act of 1996 was drafted telecommunications lobbyists, among the most powerful and well funded in the country, lobbied hard to restrict local authority; however, congress did the opposite. They granted local governments the power to regulate the placement of wireless facilities.

The power and authority to regulate cell towers and antennas lies with the county. Despite this fact, telecommunications representatives continue to tell local governments that they must install cell towers and antennas because of the Federal Telecommunications Act. This misinformation must be countered with facts. Local governing bodies must be empowered with accurate information.

In fact, if the county does not regulate this infrastructure, no one does. The FCC sets the exposure limits but does not apply or enforce those limits. Car emissions are inspected but cell towers can emit whatever they want and are not inspected for compliance or enforced. No one is policing the telecommunications corporations. Local governments are the only line of defense against constituents being exposed to illegally excessive levels of radiation. The county is obligated to protect its citizens and ensure the quiet enjoyment of our streets and neighborhoods.

## **Caution about a Resolution**

In July of 2020 Hawaii County passed a resolution to halt the deployment of 5G until it could be proven safe beyond a reasonable doubt and public health and welfare could be assured. We applauded this action; however, a resolution lacks the force of law. Telecoms know this and instead of acting as a deterrent, we have reason to believe passing the resolution may have made Hawaii County a target for aggressive deployments of cell towers. In attempting to uphold the resolution the Hawaii County Windward Planning Commission was recently sued by AT&T, no negotiation attempted, no questions asked. Thus, we caution against pursuing a resolution and instead advise focusing on an ordinance, which empowers the planning department with clear direction.

In addition, lack of an ordinance governing 5G infrastructure makes Maui county a target for site developers. Site developers are not telecommunications companies and do not provide cell service. They simply install infrastructure (towers, antennas, etc.) and lease that space to the telecommunications companies (i.e., Verizon, AT&T, T-Mobile). Site developers are notorious for aggressively installing fast and cheap infrastructure with blatant disregard for a local community's needs and interests.

Time is of the essence as 5G deployments are happening at an accelerated pace. Maui currently has 14 facilities designated as 5G, with more in the pipeline.

## **Caution about FirstNet**

A new AT&T strategy to grab more land for towers and antennas, FirstNet has taken many communities by surprise. AT&T is using first responders as a way to grow their commercial wireless network in Hawaii and across the country.

Powerful AT&T lobbyists are going straight to police departments, fire departments and other first responders to hard-sell them on their FirstNet plan, offering handsome incentives and making extreme promises, a frequently used strategy. FirstNet amounts to an elaborate land grab that is unnecessary, especially in Hawaii. The first responder network that is currently in place functions well here. FirstNet is overkill. It's a wolf in sheep's clothing; a Trojan horse.

Under the guise of public safety, part of the plan involves AT&T (aka New Cingular, aka Mobility) gaining official public utility status that would give them access to erect cell towers on public lands that would typically be restricted or off-limits to commercial/industrial installations from a massive multinational corporation. Such a proposal is currently under consideration in Waimea Canyon State Park on Kauai, and here on Maui on agricultural land adjacent to Hawaiian homes in Waiehu.

## Litigation and Threats of Litigation

Litigation and threats of litigation are common with telecoms; however, even if the County violates the Telecommunications Act and telecom sues, and even if we lose, the County is not financially liable. The County only pays their own attorney fees and typically it is a very quick case. Because of the shot clock (which imposes time restraints on the permitting process), these cases are given priority. Telecom gets no damages or attorney fees. They only get the permit.

## Local Communications Ordinances

Because 5G is an ever-changing marketing term, it's best to avoid using the term and instead use *Communications Ordinance*. The majority of ordinances regulate what are called *small cell facilities* (which are actually macro antennas) as well as DAS Systems (distributed antenna systems that often contain hundreds of nodes), because most local zoning ordinances already address cell towers. Small cells and DAS nodes are typically installed in public rights of way (on electric poles, telephone poles, street lights) in urban and residential areas.

**Question:** Does Maui County have zoning code that governs cell towers?

This report assumes that we do; however, if not, then we need one and timing is of the essence. This report focuses on 5G related infrastructure, not 4G towers.

The law provides that local jurisdictions can regulate, but cannot prohibit or have the effect of prohibiting, a telecommunications facility. In order to justify deploying facilities, applicants must prove two things:

- 1) Prove the telecom carrier has a significant gap in personal wireless services
- 2) Prove their facility is the least intrusive means of covering that gap

Telecoms cannot reach this goal with 5G because 5G does not yet exist, so they cannot have a gap in coverage. The FCC recently reinterpreted the requirements differently and said the requirements include new services. A top US telecommunications expert litigator says this will not stand up in court, as it will negate decades of legal precedent, but it has not yet been tried.

Telecommunications representatives are lobbying state representatives to install cell facilities in public rights of way. They are asking states to adopt a state law to take away home rule. Unfortunately this happened in Hawaii. In late 2018 Hawaii adopted a 5G fast-track bill, HB2651 <https://legiscan.com/HI/bill/HB2651/2018> . This bad piece of legislation, crafted by the right-wing, pro-corporation ALEC group, was shopped around to various states. It is especially bad for Hawaii, as each island is unique and local governments are in the best position to know what is right for the different needs of their islands' residents. Home rule should have been honored, but it wasn't.

A County ordinance would be adopted to prevent adverse impacts of wireless facilities. Any denial of a permit must be based on substantial evidence in writing. An ordinance would ensure wireless facilities are placed in a certain way as to avoid insufficient fall zones, fires, reduction in property values, aesthetic impacts, structural failures, debris fall, etc.

An ordinance would identify the board that makes permit application decisions (typically planning) and describes the basis of factual determinations they will make. For example, if a resident says the antenna would have an adverse aesthetic impact on their home, planning has to factually determine whether or not there will be an adverse aesthetic impact on that home. That can be based on testimony, a letter from a real estate broker or appraiser, stating this will reduce property value by a certain percentage. This needs to be specified in the ordinance.

Options for items that have been included in local ordinances in other jurisdictions are outlined below in two approaches: a conservative approach and a bolder approach.

### **Conservative Approach**

Ten areas are typically addressed:

- 1) Clearly describe the legislative intent of the ordinance
- 2) Telecommunications infrastructure deployments cannot violate or be incompatible with local zoning codes, so include these
- 3) Applicant/carrier must prove that there is a need for additional infrastructure by providing hard data evidence of a gap in service
- 4) Applicant/carrier must prove that their wireless facility is the least intrusive means of covering that gap
- 5) Require a setback in residential areas and a setback from schools (recommended 1500 foot and 3000 foot respectively)
- 6) Require an FCC compliance report that is based on general population exposure limits, not on occupational exposure limits
- 7) Address aesthetic issues
- 8) Radio Frequency (RF) testing is required by third party RF engineer
- 9) A NEPA review is required
- 10) ADA law of reasonable accommodation is included

Carefully read the local zoning code to see what it requires and include that. Look for smart planning provisions. Smart planning provisions allow for the adequate cell coverage in commercial zones but minimize towers and minimize adverse impacts in residential areas.

Require a Drive Test to provide the hard data necessary to prove a gap in coverage. Computer simulation data is not acceptable. A technician must be hired to drive around in the designated area and collect data. Through a Drive Test several hundred thousand data points are produced. Only if planning gets that hard data can they determine where a facility needs to be placed. The county pays for the testing.

If the applicant is claiming capacity deficiency, then dropped call records are required and must include the total number of calls, not just the number of dropped calls, so that an accurate percentage may be determined. Propagation maps must be verified, as many are inaccurate.

As a tourist destination with a tourist driven economy, Maui county has legitimate concerns about aesthetics. People do not come here to immerse themselves in technology. They come here to unplug, to escape that lifestyle and to connect with nature and with beauty. The visual blight caused by the densification of cell towers and antennas is an important concern. Cultural concerns as well can be addressed, including respect for the land, for the natural surroundings, and for cultural resources.

Require third party inspections of radiation emissions done at certain intervals (i.e., every month) with certified reports submitted to the county. The exact terms of this may vary. According to US expert telecommunications attorney Andrew Campanelli, telecommunications towers routinely emit over the FCC limits. The FCC sets the limits but they do not test or enforce them. Regular and ongoing emission verification by a third party will address the problem. Local governments are the only line of defense against constituents being exposed to illegally excessive levels of radiation.

Self Paid Testing - The County would randomly test facilities at our own expense. If we find any exceeding FCC limits we would schedule a hearing and give the owner 30 days to explain why we shouldn't take down the facility and strip them of their permit. (Hiring an RF engineer for testing costs about \$400.)

Owner Paid Testing – Same as above but require the facility owners to pay for the testing. (Several California municipalities implemented this eight years ago. This option could potentially bring a lawsuit from the owner but hasn't as yet.)

Citizen Testing - At any time any citizen can test a facility and if they find, verified by an engineer, it exceeds FCC limits they can personally file a lawsuit against the owner. If it's proven to be emitting over the FCC limits the owner has to pay. (The California city of Calabasas enacted this.)

Require a NEPA review – In a 2019 ruling by the Washington DC Circuit Court of Appeals, any application for small cell wireless telecommunication facilities installation is incomplete if it does not include a National Environmental Policy Act (NEPA) review. The full court order can be found here: <https://ehtrust.org/wp-content/uploads/Court-Opinion.pdf>

The Americans with Disabilities Act (ADA) is federal law that must be honored. Electrosensitivity is a recognized disability. Telecommunications carriers say that they are utilities. If radio frequency (RF) emissions from a utility cause a person to suffer adverse health effects, or be evicted from their home, or prevent a person from enjoying the occupancy of their own home, that is covered by the ADA. RF radiation exposure can serve as a reasonable demand for ADA accommodation.

### **Bolder Approach**

In addition to the above:

- 1) Prohibit small cells in residential areas and near schools
- 2) Prohibit mounting small cells on light poles because of liability transfer
- 3) Require proof of personal injury/damage liability insurance
- 4) Require a Need test
- 5) Cap effective radiated power

Allow small cells only in industrial, commercial and mixed use zones, not in residential areas. (This has been implemented in several jurisdictions in California and it stands.)

No infrastructure mounted on light poles; allow wooden utility poles only. In the over line code OSHA may prohibit placement of infrastructure above high voltage power lines due to arc flash/fire hazard potential. Prohibit applicant from replacing the pole and require that poles be the same size and at the same height. Require that all ancillary equipment be placed underground.

Make proof of insurance required and the policy must NOT exclude personal injury or damage liability from exposure to radiation. The policy must be issued by an "A" rated company, cover named applicant and each antenna operator, be "claims made," list the County as an additional insured, and have coverage limits of at least \$2 million per person and \$25 million per incident. The policy must not exclude personal injury or damage liability from exposure to radiation. This latter requirement is necessary since most general liability policies typically have pollution exclusions that also apply to environmental contamination such as RF/EMF radiation. An addendum or rider is typically necessary. The applicant must supply proof of insurance before the permit is issued. (This has been implemented in several jurisdictions in California and it stands.)

Require a Need test – Sometimes called a Drive Test, every six months an independent, third party, radio frequency (RF) engineer is required to drive around and take an inventory of every antenna and to document frequency and signal strength (DBM, decibel milliWatt) readings and turn this over to the county. Consider charging the permit applicant for this service. Thus, when an applicant



comes forward for a new antenna the county would already have a map of coverage and be able to easily identify need, which is a requirement. <https://ourtownourchoice.org/wewantit/>

Cap effective radiated power (ERP) – ERP is power that is just about to leave the antenna. Regulate ERP by capping it. According to 47 US Code 324, cell towers are radio towers, like those belonging to radio stations, and are required by law to use minimum power. Telecommunications service is defined by the FCC as phone service. It does not include video streaming, gaming, or internet, which is what demands higher power. Very minimal power is needed to make a phone call. Only .002 watts of power is needed to get 5 bars on cell phone 1/2 mile away from a transmitter. Small cells have been shown to be 25 million times more powerful than that. <https://ourtownourchoice.org/vhp/>

### **Current Ordinances**

Here is a list of many US Local Government Ordinances:

<https://ehtrust.org/usa-city-ordinances-to-limit-and-control-wireless-facilities-small-cells-in-rights-of-ways/>

Several of the best ordinances are in California, such as Petaluma, Calabasas, Burbank and Davis.

In 2019 the state of New Hampshire passed a law establishing a commission to study the health and environmental effects of evolving 5G technology. The landmark document is almost 400 pages long. The report itself is 17 pages with 370+ pages of research and supporting materials. Here is the link: <http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>

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Debra Greene, PhD, is not an attorney and does not give legal advice. She is not a city planner, nor a telecommunications engineer. She is a citizen journalist with a PhD in communication (Ohio State University) who founded a coalition of concerned Hawaii residents to advocate for safe technology. This report contains suggestions and recommendations only.